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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/788,490	02/21/2001	Katsushige Matsubara	088941/0188	6765

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FOLEY AND LARDNER
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EXAMINER

SELLERS, DANIEL R

ART UNIT	PAPER NUMBER
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2644

DATE MAILED: 08/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/788,490	Applicant(s) MATSUBARA, KATSUSHIGE	
	Examiner Daniel R. Sellers	Art Unit 2644	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 February 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 February 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

1. Figures 8, 9A, and 9B should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 3, 5, 10, and 12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

4. Claim 3 recites the limitation "the coded data" in line 3. There is insufficient antecedent basis for this limitation in the claim.

5. Claim 5 recites the limitation "the encoded audio data" in line 3. There is insufficient antecedent basis for this limitation in the claim.

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6. Furthermore, claim 5, recites that "An audio storage device... stores... the number of samples..., **in advance**." It is unclear what the meaning of in advance is. The office interprets that this is a positional limitation, and the number of channels and samples are stored in advance, or at the head of a file, of actual sampled audio data.

7. Claim 10 recites the limitation "the coded data" in line 3. There is insufficient antecedent basis for this limitation in the claim.

8. Claim 12 recites a similar limitation that claim 5 recites. The phrase "... in advance..." is unclear. Similarly the office interprets in the same manner as in claim 5.

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

10. Claims 1, 2, 9, 14 and 15 are rejected under 35 U.S.C. 102(e) as being anticipated by Yaple, U.S. Patent 6,922,730.

11. Regarding claims 1 and 2, the further limitation of claim 1, Yaple teaches an audio system for transmitting various audio programs with the features of claim 1 (see column 2, lines 48-67, col. 5, lines 45-64, col. 6, lines 30-48, and figures 1-7). The teachings of Yaple inherently use address generators for at least the correct operation of transferring audio to and from buffers. Yaple further teaches the transferring and decoding of audio before storing (Col. 3, line 62 – Col. 4, line 25). Further, it is well known and the office takes **Official Notice** that music files include header information, wherein the number of channels, the number of bits per sample, the sampling rate, and other pertinent information has been stored.

12. Regarding claim 9, the further limitation of claim 8, see the preceding argument with respect to claim 2. Yaple teaches the features of claim 1, and Yaple teaches the use of a computer, or a device that uses a plurality of semiconductors. Therefore, Yaple teaches the use of a semiconductor device, and Yaple teaches the feature of decoding before storing.

13. Regarding claims 14 and 15, the further limitation of claim 14, see the preceding argument with respect to claims 1 and 2. Yaple teaches a computer-implemented method and teaches decoding before storing.

Claim Rejections - 35 USC § 103

14. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

15. Claims 1, 3-8, 10-14, and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Degen et al., U.S. Patent No. 5,386,493, and the Audio Interchange File Format: "AIFF" standard (hereinafter Degen and the AIFF standard, respectively).

16. Regarding claim 1, see Degen

An audio data storage device comprising:

a storage device for storing audio data; (Col. 4, lines 8-12 and Col. 5, line 60 – Col. 6, line 4)

a channel detector for detecting a channel of the audio data; (Col. 14, lines 9-18)

an input sample number detector for detecting the number of samples of the audio data to be written into the storage device; (Col. 13, lines 5-8 and Col. 14, lines 19-26)

an output sample number detector for detecting the number of samples of the audio data to be read from the storage device;

an address generator for generating an address for writing and reading the audio data based on the channel detected by the channel detector, the number detected by the input sample number detector, the number detected by the output sample number detector, the number of channels of the audio data, and the number of samples included in one channel; and (inherent)

a controller for directing the storage device to read and write the audio data based on the address generated by the address generator. (Col. 13, lines 30-36)

Degen teaches a system with these features. The address generator is inherent in the routing of information to and from a storage device, such as the magnetic device or the buffer memory taught by Degen. The AIFF standard teaches that the audio file is a stream of interleaved sample frames in a Sound Data Chunk (AIFF Standard, pp. 7-9). It is inherent that an audio file conforming to this standard will contain audio samples

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that are stored at addresses based on the number of channels, number of input samples, number of output samples, and the number of samples included in one channel. It would have been obvious for one of ordinary skill in the art to combine the teachings of Degen with the AIFF standard for conforming to the standard mentioned in Degen.

17. Regarding claim 3, the further limitation of claim 1, see the AIFF standard

... wherein the controller detects the number of channels and the number of samples included in the coded audio data, and outputs the numbers to the address generator. (p. 9, first paragraph)

The AIFF standard teaches that this information is detectable in the header information of an AIFF audio file.

18. Regarding claim 4, the further limitation of claim 1, see the preceding argument with respect to claim 1. Degen teaches a system with storage devices, wherein the audio is encoded and stored, preferably, in the AIFF format (Col. 6, lines 15-18).

19. Regarding claim 5, the further limitation of claim 1, see the preceding argument with respect to claim 1. The AIFF standard teaches that this information is stored in a header portion, or prior to the main body of the file, which comprises the audio data.

20. Regarding claim 6, the further limitation of claim 1, see the preceding argument with respect to claim 1. The teachings of Degen include address generating means (Col. 13, lines 30-36), and it is inherent that the address generating means generates addresses when instructed to.

21. Regarding claim 7, the further limitation of claim 1, see Degen

*... wherein the address generator comprises:
a first address generator for specifying a first sequence of addresses; and*

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a second address generator for specifying a second sequence of addresses, wherein the controller directs the storage device to read and write the audio data while alternately switching the first address generator and the second address generator. (Col. 12, lines 26-54)

Degen teaches this feature, wherein it is inherent that a buffer is defined by a sequence of addresses.

22. Regarding claim 8, the further limitation of claim 1, see Degen

... wherein the storage device, the channel detector, the input sample number detector, the output sample number detector, the address generator, and the controller are provided in a semiconductor device. (Col. 4, lines 8-12).

Degen teaches a computer implemented method, wherein it is inherent that a computer is a device that uses a plurality of semiconductors, or broadly it is a semiconductor device. Therefore the combination teaches this feature.

23. Regarding claim 10, the further limitation of claim 8, see the preceding argument with respect to claim 3. The combination teaches this feature for address generation.

24. Regarding claim 11, the further limitation of claim 8, see the preceding argument with respect to claim 4. The combination teaches the feature of storing data to be encoded.

25. Regarding claim 12, the further limitation of claim 8, see the preceding argument with respect to claim 5. The combination teaches the feature of storing header data, or data preceding the body of audio data in a file.

26. Regarding claim 13, the further limitation of claim 8, see the preceding argument with respect to claim 6. It is inherent that addresses are generated when needed.

27. Regarding claim 14, see the preceding argument with respect to claim 1. The combination teaches a computer implemented method, which utilizes a computer readable storage medium, with these features.

28. Regarding claim 16, the further limitation of claim 14, see the preceding argument with respect to claim 4. The combination teaches the feature of encoding audio.

Conclusion

29. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Browning et al., U.S. Patent No. 5,420,997 - Memory having concurrent read and writing from different addresses.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel R. Sellers whose telephone number is 571-272-7528. The examiner can normally be reached on Monday to Friday, 9am to 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivian Chin can be reached on 571-272-7848. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DRS



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